

Purchase Order Receipt Listing

Monday, July 31, 2017 1:25:34 PM

All amounts are calculated in domestic currency.

All Vendors PO ID PO37126 All Receipt Dates All Line Item Types

All Item ID/GL/WOs All Rec. Employees All Currencies

Grouped by Vendor ID

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M/ Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
Vendor ID/Vendor Name VU-TWM001 TW Metals											
PO37126	1		M6061T6T0.3125W.0 f 58	DAS 5	7/27/2017	7/31/2017	48.0000	✓	0.0000	0	\$0.00
USD	No		ALUM TUBE .3125 f x .058w m138184	9-89	48.0000	PLOU01			0.0000	0	
	2		M6061T6T0.375W.05 f 8	DAS 5	7/27/2017	7/31/2017	48.0000	✓	0.0000	0	\$0.00
	No		6061-T6 RD Tube .375 x.058W m138184	9-89	48.0000	PLOU01			0.0000	0	
	3		M6061T6T0.500W.05 f 8	DAS 5	7/27/2017	7/31/2017	48.0000	✓	0.0000	0	\$0.00
	No		6061-T6 RD Tube .500 x.058W m138184	9-89	48.0000	PLOU01			0.0000	0	
	4		M6061T6T0.625W.12 f 5	DAS 5	7/27/2017	7/31/2017	24.0000	✓	0.0000	0	\$0.00
	No		6061-T6 RD Tube 0.625 X.125W m138184	9-89	24.0000	PLOU01			0.0000	0	
	5		M6061T6T2.00W.0.12 f 5	DAS 5	7/27/2017	7/31/2017	24.0000	✓	0.0000	0	\$0.00
	No		6061T6 RD TUBE 2.00 X.125W m138184	9-89	24.0000	PLOU01			0.0000	0	
	6		M304TR0.500W.049 f 304 RD Tube .500 x .049W m138184	DAS 5	7/27/2017	7/31/2017	40.0000	✓	0.0000	0	\$0.00
	No			9-89	40.0000	PLOU01			0.0000	0	
	7		71401-45 PROCUREMENT QUALITY CLAUSES m138184	DAS 5	7/27/2017	7/31/2017	1.0000	✓	0.0000	0	\$0.00
	No			9-89	1.0000	PLOU01			0.0000	0	

Purchase Order ID/ Curr Type	Line Nbr/ Insp Req	Project ID	Reference/ Description/ Cert Std	PO U/M / Stock U/M	Required Date Required Qty	Recv Date/ Recv Emp	Recv Qty (PO U/M)	Cost Per Unit/ Recv Value	Inspected Qty/ Rejected Qty (PO U/M)	MRB Qty/ MRB Reject Qty	Book Amt
------------------------------------	-----------------------------	------------	--	-----------------------	-------------------------------	---------------------------	-------------------------	------------------------------	--	-------------------------------	----------

Total Received Quantity:
 Total Qty to Inspect (PO U/M): 233.0000
 Total Reject Quantity: 0.0000
 Total Receipt Value: 0.0000
 Total Balance Due Quantity: \$0.00
 0.0000



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80869462

FROM: CHIC

PAGE 1

CUST NUMBER: 1203820 NET WGT: 46.177 REQ.DATE: 07/27/17 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/21/17
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO37126 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
0001 41723 D6061-T6 5/16 OD X .058 WA 12 FT ML

CLN# ORD QTY INVOICE QTY SHIPPED QTY WT
48.000 FT 48.000 FT 48.000 FT 2.621

PCS
4

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49371043 HT:2078167 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:2078167

0002 41952 D6061-T6 3/8 OD X .058 WA 12 FT ML

CLN# ORD QTY INVOICE QTY SHIPPED QTY WT
48.000 FT 48.000 FT 48.000 FT 3.254

PCS
4

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49363913 HT:F002343920001 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:222469

0003 42276 D6061-T6 1/2 OD X .058 WA 12 FT ML

CLN# ORD QTY INVOICE QTY SHIPPED QTY WT
48.000 FT 48.000 FT 48.000 FT 4.545

PCS
4

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO:49365548 HT:F002361250002 PC: 4 CUSTOMER QTY: UOM
MLT:UNITED STATES MFG:UNITED STATES SLB/CL:222661

5017731

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE
PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL
REVIEW.
<http://www.twmetals.com/invoice-terms.html>



O'Neal High-Performance Metals Group



Packing Slip

ORDER NO.: 80869462

FROM: CHIC

PAGE 2

CUST NUMBER: 1203820 NET WGT: 46.177 REQ.DATE: 07/27/17 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA CN K6A 1K7 ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/21/17
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO37126 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
0004 42588 D6061-T6 5/8 OD X .125 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	24.000 FT	24.000 FT	24.000 FT	5.541	2

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO: 49362357 HT: F002318790001 5 PC: 2 CUSTOMER QTY: UOM
MLT: UNITED STATES MFG: UNITED STATES SLB/CL: 222204

0005 44622 D6061-T6 2 OD X .125 WA 12 FT ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	24.000 FT	24.000 FT	24.000 FT	20.779	2

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: EAR99 Export License: NLR Expiration Date: 0/00/00
PO: 49370807 HT: 1403036 5 PC: 2 CUSTOMER QTY: UOM
MLT: GERMANY MFG: GERMANY SLB/CL: 65383

0006 36506 SMLS CD 304/L A269 1/2 OD X .049 WA 20' ML

CLN#	ORD QTY	INVOICE QTY	SHIPPED QTY	WT	PCS
	40.000 FT	40.000 FT	40.000 FT	9.437	2

** 1 TEST REPORTS REQUIRED **

** 1 CERTS REQUIRED **

ECCN: 2B999.g Export License: NLR Expiration Date: 0/00/00
PO: 49336439 HT: YX1506712 5 PC: 2 CUSTOMER QTY: UOM
MLT: CHINA MFG: CHINA SLB/CL: -

807731

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O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 80869462

FROM: CHIC

PAGE 3

CUST NUMBER: 1203820 NET WGT: 46.177 REQ.DATE: 07/27/17 CONFIRMED
SOLD TO: SHIP TO:
DART AEROSPACE LTD DART AEROSPACE LTD
1270 ABERDEEN ST 1270 ABERDEEN ST
HAWKESBURY ON HAWKESBURY ON
CANADA ONTARIO CANADA CN K6A 1K7

SALESPERSON: DONNA SMALLEY SHIP BY: 07/21/17
TERMS: NET 30 DAYS VIA: COMMON CARRIER
F.O.B.: SHIPPING POINT FREIGHT: PREPAID
CUST ORD NO.: PO37126 RELEASE NO.:
RECEIVING PHONE:

LINE ITEM DESCRIPTION WIDTH LENGTH
BROKERS KUEHNE AND NAGEL LTD

AREA	TYPE OF PKG	PKGS	PACK INFO	GRS	WEIGHT	WIDTH	LENGTH	HGHT
YRC	REDDICRATE	1.000			30.000	4.0000	150.0000	4
YRC	REDDICRATE	1.000			42.000	5.0000	150.0000	5
YRC	CARTON	1.000			14.000	3.0000	247.0000	3
YRC	CARTON	1.000			7.000	150.0000	2.0000	2
		4.000			93.000			

BY: MG
RT 000-

UNLOAD TYPE: NONE SPECIFIED

807731

DATE SHIPPED _____

DATE FILLED _____

THANK YOU FOR THIS ORDER

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O'Neal High-Performance Metals Group



**Packing
Slip**

ORDER NO.: 80869462 FROM: CHIC PAGE 4

CUST NUMBER: 1203820	NET WGT: 46.177	REQ.DATE: 07/27/17	CONFIRMED
SOLD TO:	SHIP TO:		
DART AEROSPACE LTD	DART AEROSPACE LTD		
1270 ABERDEEN ST	1270 ABERDEEN ST		
HAWKESBURY ON	HAWKESBURY ON		
CANADA	CN K6A 1K7	ONTARIO CANADA	CN K6A 1K7

SALESPERSON:	DONNA SMALLEY	SHIP BY:	07/21/17
TERMS:	NET 30 DAYS	235 TUBEWAY	
F.O.B.:	SHIPPING POINT	CAROL STREAM	IL 60188
CUST ORD NO.:	PO37126		
VIA:	COMMON CARRIER		
FREIGHT:	PREPAID		
RELEASE NO.:			
RECEIVING PHONE:			

"TW Metals MSDS data is available on our web site at www.twmetals.com. MSDS data can be found under the Technical Resources Tab, Product Statistics & Data and the TW Metals MSDS's heading. If you do not have web site access you may telephone 610-458-1300 and we will mail or fax a copy of our current MSDS data to your location."

"CERTIFICATE OF CONFORMANCE"

"TW Metals certifies that the material supplied on this purchase order and contained in the heat/lot number referenced above has been manufactured, inspected, and tested in accordance with the material specification. These records are on file at TW Metals. Packaging material for shipments to Europe and China consists of manufactured wood products and complies with the European emergency measures for coniferous non-manufactured wood packing material"

Authorized Test Report Clerk *Maria D. Salas* Date: 7/21/17

These commodities have been exported from the United States in accordance with the U.S. export control laws, export administrations regulations. Diversion contrary to U.S. law prohibited.

THANK YOU FOR THIS ORDER

TERMS AND CONDITIONS APPLICABLE TO THE SALE OF THESE PRODUCTS ARE SET FORTH ON OUR WEBSITE FOR YOUR CAREFUL REVIEW.
<http://www.twmetals.com/invoice-terms.html>



235 TUBEWAY
CAROL STREAM IL 60188
Tel: 630-690-0110
FAX: 16306902105

Invoice#: 80869462
Cust. PO#: PO37126
Incoterms: SHIPPING POINT
Frt. Terms: PREPAID
Ship Via: COMMON CARRIER

COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/21/17
	Ship Date: 7/21/17
	Payment Terms: NET 30 DAYS
	Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
41723	D6061-T6 5/16 OD X .058 WA	48.000 FT	\$ 2.5000 FT	\$ 120.00
1	ALUMINUM TUBE ROUND	0 IN		
	PART NUMBER:	4.000 PC		
	ECCN: EAR99			
	SCHEDULE B: 7608.20.0030			
	ALUM PIPE/TUBE - SEAMLESS			
	NET WGT: 2.621 LBS			
	COUNTRY OF MFG: UNITED STATES			
41952	D6061-T6 3/8 OD X .058 WA	48.000 FT	\$ 2.1500 FT	\$ 103.20
2	ALUMINUM TUBE ROUND	0 IN		
	PART NUMBER:	4.000 PC		
	ECCN: EAR99			
	SCHEDULE B: 7608.20.0030			

EXPORT LICENSE NUMBER: NLR
EXPIRATION DATE: 00/00/00

TW METALS, INC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, INC.

THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.

7/21/17
CONTINUE .



235 TUBEWAY
CAROL STREAM IL 60188
Tel: 630-690-0110
FAX: 16306902105

Invoice#: 80869462
Cust. PO#: PO37126
Incoterms: SHIPPING POINT
Frt. Terms: PREPAID
Ship Via: COMMON CARRIER

COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/21/17
	Ship Date: 7/21/17
	Payment Terms: NET 30 DAYS
	Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
	ALUM PIPE/TUBE - SEAMLESS			
	NET WGT: 3.254 LBS			
	COUNTRY OF MFG: UNITED STATES			
42276	D6061-T6 1/2 OD X .058 WA	48.000 FT	\$ 1.7500 FT	\$ 84.00
		0 IN		
3	ALUMINUM TUBE ROUND	4.000 PC		
	PART NUMBER:			
	ECCN: EAR99			
	SCHEDULE B: 7608.20.0030			
	ALUM PIPE/TUBE - SEAMLESS			
	NET WGT: 4.545 LBS			
	COUNTRY OF MFG: UNITED STATES			
42588	D6061-T6 5/8 OD X .125 WA	24.000 FT	\$ 5.1500 FT	\$ 123.60
		0 IN		
4	ALUMINUM TUBE ROUND	2.000 PC		
	PART NUMBER:			
EXPORT LICENSE NUMBER: NLR				
EXPIRATION DATE: 00/00/00				
TW METALS, INC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, INC.				
THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS				
Page		2	CONTINUE	



235 TUBEWAY
CAROL STREAM IL 60188
Tel: 630-690-0110
FAX: 16306902105

Invoice#: 80869462
Cust. PO#: PO37126
Incoterms: SHIPPING POINT
Frt. Terms: PREPAID
Ship Via: COMMON CARRIER

COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA Contact: CHANTAL 16136321053	Invoice Date: 7/21/17
	Ship Date: 7/21/17
	Payment Terms: NET 30 DAYS
	Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA CN K6A 1K7

Freight Forwarder/Intermediate Ship To:
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ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
44622	ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS NET WGT: 5.541 LBS COUNTRY OF MFG: UNITED STATES D6061-T6 2 OD X .125 WA	24.000 FT 0 IN 2.000 PC	\$ 8.5000 FT	\$ 204.00
5	ALUMINUM TUBE ROUND PART NUMBER: ECCN: EAR99 SCHEDULE B:7608.20.0030 ALUM PIPE/TUBE - SEAMLESS NET WGT: 20.779 LBS COUNTRY OF MFG: GERMANY			
36506	SMLS CD 304/L A269 1/2 OD X .049 WA	40.000 FT	\$ 2.8000 FT	\$ 112.00
EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00				
TW METALS, INC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, INC. THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS				
Page 3				

807-731
7/21/17
CONTINUE.



235 TUBEWAY
CAROL STREAM IL 60188
Tel: 630-690-0110
FAX: 16306902105

Invoice#: 80869462
Cust. PO#: PO37126
Incoterms: SHIPPING POINT
Frt. Terms: PREPAID
Ship Via: COMMON CARRIER

COMMERCIAL INVOICE

Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/21/17
	Ship Date: 7/21/17
	Payment Terms: NET 30 DAYS
	Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
6	STAINLESS STEEL TUBE ROUND PART NUMBER: ECCN: 2B999.g SCHEDULE B: 7304.41.0000 S/S PIPE/TUBE ROUND SMLS W/OD <=3" NET WGT: 9.437 LBS COUNTRY OF MFG: CHINA FREIGHT CHARGES QUANTITY AND TYPE OF BOXES: 1 REDDICRATE 150.0000 X 4.0000 X 4.0000 TOTAL WGT: 13.200 LBS GROSS WGT: 30.000 LBS 1 REDDICRATE EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00 <small>TW METALS, INC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, INC.</small> <small>THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED. THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S. GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS.</small>	0 IN 2.000 PC		.00

807231

7/21/17
 CONTINUE

Page 4



235 TUBEWAY
CAROL STREAM IL 60188
Tel: 630-690-0110
FAX: 16306902105

Invoice#: 80869462
Cust. PO#: PO37126
Incoterms: SHIPPING POINT
Frt. Terms: PREPAID
Ship Via: COMMON CARRIER

COMMERCIAL INVOICE


Sold To: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKESBURY ON CANADA CN K6A 1K7 C Contact: CHANTAL 16136321053	Invoice Date: 7/21/17
	Ship Date: 7/21/17
	Payment Terms: NET 30 DAYS
	Ship To/Final Destination: DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON ONTARIO CANADA CN K6A 1K7
Freight Forwarder/Intermediate Ship To:	

ITEM# / LINE#	DESCRIPTION	QUANTITY	UNIT VALUE	SUBTOTAL
150.0000 X	5.0000 X	5.0000		
TOTAL WGT:	20.700 LBS			
GROSS WGT:	42.000 LBS			
1	CARTON			
247.0000 X	3.0000 X	3.0000		
TOTAL WGT:	9.400 LBS			
GROSS WGT:	14.000 LBS			
1	CARTON			
2.0000 X	150.0000 X	2.0000		
TOTAL WGT:	2.600 LBS			
GROSS WGT:	7.000 LBS			
EXPORT LICENSE NUMBER: NLR EXPIRATION DATE: 00/00/00 TW METALS, INC CERTIFIES THAT THE COUNTRY OR COUNTRIES OF MANUFACTURE INDICATED ABOVE IS TRUE AND CORRECT AS CONTAINED IN THE RECORDS OF TW METALS, INC. THESE ITEMS ARE CONTROLLED BY THE U.S. GOVERNMENT AND AUTHORIZED FOR EXPORT ONLY TO THE COUNTRY OF ULTIMATE DESTINATION FOR USE BY THE ULTIMATE CONSIGNEE OR END-USER(S) HEREIN IDENTIFIED THEY MAY NOT BE RESOLD, TRANSFERRED, OR OTHERWISE DISPOSED OF, TO ANY OTHER COUNTRY OR TO ANY PERSON OTHER THAN THE AUTHORIZED ULTIMATE CONSIGNEE OR END-USER(S), EITHER IN THEIR ORIGINAL FORM OR AFTER BEING INCORPORATED INTO OTHER ITEMS, WITHOUT FIRST OBTAINING APPROVAL FROM THE U.S GOVERNMENT OR AS OTHERWISE AUTHORIZED BY U.S. LAW AND REGULATIONS				
Payable in US Dollars			Sales Tax .00 746.80	

[Signature]
7/21/17



North American Free Trade Agreement
CERTIFICATE OF ORIGIN

1. EXPORTER NAME AND ADDRESS : TW METALS - CHICAGO 235 TUBEWAY CAROL STREAM IL 60188 UNITED STATES TAX IDENTIFICATION NUMBER : 464009440		2. BLANKET PERIOD : DD MM YY FROM : 21-Jul-17 TO : 21-Jul-17			
3. PRODUCER NAME AND ADDRESS : AVAILABLE TO CUSTOMS UPON REQUEST		4. IMPORTER NAME AND ADDRESS : DART AEROSPACE LTD 1270 ABERDEEN ST HAWKSBURY ON ONTARIO CANADA CN K6A 1K7 CANADA TAX IDENTIFICATION NUMBER :			
5. DESCRIPTION OF GOOD(S)	6. H.S. TARIFF CLASSIFICATION NUMBER	7. PREFERENCE CRITERION	8. PRODUCER	9. NET COST	10. COUNTRY OF ORIGIN
ALUMINUM TUBE ROUND	7608.20.0030	B	NO(2)	NO	US
<p>I CERTIFY THAT: THE INFORMATION ON THIS DOCUMENT IS TRUE AND I ASSUME THE RESPONSIBILITY FOR PROVIDING SUCH REPRESENTATIONS. I UNDERSTAND THAT I AM LIABLE FOR ANY FALSE STATEMENTS OR MATERIAL OMISSIONS MADE ON OR IN CONNECTION WITH THIS DOCUMENT. I AGREE TO MAINTAIN AND PRESENT UPON REQUEST, DOCUMENTATION NECESSARY TO SUPPORT CERTIFICATE, AND TO INFORM, IN WRITING, ALL PERSONS TO WHOM THE CERTIFICATE WAS GIVEN, OF ANY CHANGES THAT COULD AFFECT THE ACCURACY AND VALIDITY OF THIS CERTIFICATE, THE GOODS ORIGINATED IN ONE OR MORE OF THE PARTIES AND COMPLY WITH THE REQUIREMENTS SPECIFIED FOR THOSE GOODS IN THE NORTH AMERICAN FREE TRADE AGREEMENT, AND UNLESS SPECIFICALLY EXEMPT IN ARTICLE 411 OR ANNEX 401 THERE HAS BEEN NO FURTHER PRODUCTION OR ANY OTHER OPERATION OUTSIDE THE TERRITORIES OF THE PARTIES. AND THIS CERTIFICATE CONSISTS OF PAGES, INCLUDING ATTACHMENTS.</p>					
11. AUTHORIZED SIGNATURE : 		COMPANY : TW METALS			
NAME (PRINT OR TYPE) : MARIA GALEANA		TITLE : EXPORT DEPARTMENT			
DATE DD MM YY 21-Jul-17		TELEPHONE : 630-690-0110			



CERTIFICATE OF ORIGIN

1. EXPORTER NAME AND ADDRESS :

TW METALS - CHICAGO
235 TUBEWAY
CAROL STREAM IL 60188
UNITED STATES

2. BLANKET PERIOD :

DD MM YY DD MM YY
FROM: 21-Jul-17 TO: 21-Jul-17

TAX IDENTIFICATION NUMBER: 464009440

3. PRODUCER NAME AND ADDRESS :

AVAILABLE TO CUSTOMS UPON REQUEST

4. IMPORTER NAME AND ADDRESS :

DART AEROSPACE LTD
1270 ABERDEEN ST
HAWKSBURY ON
ONTARIO CANADA CN K6A 1K7
CANADA

TAX IDENTIFICATION NUMBER :

5. DESCRIPTION OF GOOD(S)

6. H.S. TARIFF
CLASSIFICATION
NUMBER7. PREFERENCE
CRITERION

8. PRODUCER

9. NET COST

10. COUNTRY OF
ORIGIN

ALUMINUM TUBE ROUND

7608.20.0030

B

NO (2)

NO

GERMANY

STAINLESS STEEL TUBE ROUND

7304.41.0000

B

NO (2)

NO

CHINA

I CERTIFY THAT:

THE INFORMATION ON THIS DOCUMENT IS TRUE AND I ASSUME THE RESPONSIBILITY FOR PROVIDING SUCH REPRESENTATIONS. I UNDERSTAND THAT I AM LIABLE FOR ANY FALSE STATEMENTS OR MATERIAL OMISSIONS MADE ON OR IN CONNECTION WITH THIS DOCUMENT.

I AGREE TO MAINTAIN AND PRESENT UPON REQUEST, DOCUMENTATION NECESSARY TO SUPPORT CERTIFICATE, AND TO INFORM, IN WRITING, ALL PERSONS TO WHOM THE CERTIFICATE WAS GIVEN, OF ANY CHANGES THAT COULD AFFECT THE ACCURACY AND VALIDITY OF THIS CERTIFICATE:

THE GOODS ORIGINATED IN THE COUNTRY AS SPECIFIED IN BOX 10 OF THIS FORM.

THIS CERTIFICATE CONSISTS OF PAGES, INCLUDING ATTACHMENTS.

11. AUTHORIZED SIGNATURE :

COMPANY: TW METALS

NAME (PRINT OR TYPE) :

MARIA GALEANA

TITLE :

EXPORT DEPARTMENT

DATE :

DD MM YY
21-Jul-17

TELEPHONE :

630-690-0110



A COMPANY OF MUELLER INDUSTRIES

PRECISION TUBE CO.
287 WISSAHICKON AVE.
NORTH WALES PA 19454

Control No: 4594

CERTIFIED TEST REPORT

CUSTOMER PURCHASE ORDER NO. M 49371043 LINE 001		CUST. ORD. NO. 456099	PRECISION TUBE P/N 24A031250580005	
SOLD: TW METALS TO 175 TUBEWAY FOREST PARK, GA 30298 UNITED STATES		SHIP: TW METALS TO 175 TUBEWAY FOREST PARK, GA 30298 UNITED STATES		
QUANTITY ORD. 2400 FT	DESCRIPTION METAL - 6061 ALUM TEMPER - T6 SPEC - AMS 4082P ASTM-B-210-12 AMS-WW-T-700/6C LENGTH - 12 FT LGTH TOL +.1250 IN -.0000 IN SHAPE - ROUND FINISH - STRAIGHT EXACT LENGTHS OD .3125 +.0030 -.0030 ID .3125 +.0030 -.0030 WALL .0580 +.0040 -.0040		QTY. SHIPPED 2568 FT	DATE SHIPPED 06/28/17

MECHANICAL PROPERTIES					
SAMPLE #	TENSILE STRENGTH (P.S.I.)	YIELD STRENGTH (P.S.I.)	ELONGATION IN 2 INCHES (%)	ROCKWELL HARDNESS	AVERAGE GRAIN SIZE (MM.)
1	45,348	40,075	18		

DESTRUCTIVE TESTS

Comments: FAR BAA COMPLIES, DFARS BAA COMPLIES, FAR TAA COMPLIES


EDDY CURRENT: PASS

NON-DESTRUCTIVE TESTS

DAS
5
8-89

TEST REPORTS
ACCEPTED BY
49371043

JUL 10 2017
TW METALS

ALLOY: 6061		HEAT:		CHEMICAL COMPOSITION								5			
TRACEABILITY #: 2078167										9-89					
RAW MATL VENDOR: PTC11774 - KAISER ALUMINUM															
Min	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Al						
	0.40		0.15		0.80	0.04									
Max	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	Rem.						
OTHER ELEMENTS: 0.05 MAX EACH / 0.15 MAX TOTAL															
We hereby certify that the															

We hereby certify that the material has been manufactured and tested in accordance with the requirements of the applicable specifications and descriptions set forth on Precision Tube's sales acknowledgement. During the manufacturing, testing and inspection, the product did not come into direct contact with mercury or any of its compounds, nor with any mercury containing device employing a single boundary containment. Test results indicate that the material is compliant with the current revision of the RoHS Directive (2011/65/EU).

Melted and Manufactured in USA
QMS Registered to ISO 9001: 2008

By:

Matthew Flynn-Heptford
Quality Engineer

06/28/17

Page: 1 of 1

15

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
2425 STEVENS DRIVE
RICHLAND, WA 99352

Best in Class

CERTIFIED TEST REPORT

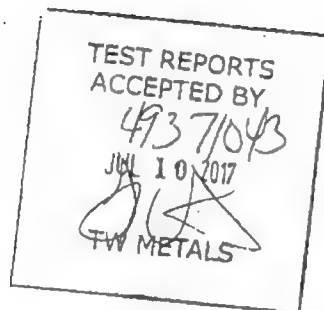
<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms and conditions of sale. Test reports are on file, subject to examination.

JOSEPH AMES, QUALITY MANAGER

Jph



MG

KAISER ALUMINUM FABRICATED PRODUCTS

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49363913-1		CUSTOMER PART NUMBER: 41952		PRODUCT DESCRIPTION: Drawn Seamless Tube/Pipe	
KAISER ORDER NUMBER: 222469	LINE ITEM: 001	SHIP DATE: 02/24/2017	KAISER LOT NUMBER: F00234392	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 381.000 LB	QUANTITY: 469.000 PCS	B/L NUMBER: 224425	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

Actual Physical Properties

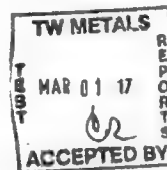
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
DAS 5 9-89 F00234392	0001	1	45.9	38.8	17.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D76511	.59	.28	.23	.06	.98	.08	.07	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.3750"; Wall: 0.0580"; Round @
AMS4082P AMS-WW-T-700/6C ASTM B210-12
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
(DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
TRADE AGREEMENTS).

Plant Serial: 00024262
Kaiser Order Number: 222469
Line Item: 001

KAISER

ALUMINUM

FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager



Plant Serial: 00024262
Kaiser Order Number: 222469
Line Item: 001

C

KAISER ALUMINUM

FABRICATED PRODUCTS

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49365548-1		CUSTOMER PART NUMBER: 42276		PRODUCT DESCRIPTION: Drawn Seamless Tube/Pipe	
KAISER ORDER NUMBER: 222661	LINE ITEM: 001	SHIP DATE: 03/20/2017	KAISER LOT NUMBER: F00236125	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 443.000 LB	QUANTITY: 388.000 PCS	B/L NUMBER: 224652	DIAM/DAF/THKNS: 	WIDTH: 	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

Actual Physical Properties

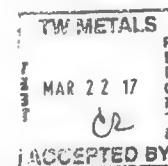
REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON% IACS	BEND
F00236125	0001	1	46.7	41.1	17.0	N/A	N/A	N/A
F00236125	0002	1	46.2	40.9	18.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D76510	.62	.23	.23	.05	.99	.07	.07	.02	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.5000"; Wall: 0.0580"; Round @
AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F
WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS4082P, WAS NOT OILED.
This Product Complies to FAR BAA, DFARS BAA, FAR TAA
COMPLIES TO DIN EN 10204 JAN 2005
No Weld Repair. Mercury Free.



Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5 TRADE AGREEMENTS).

Plant Serial: 00024461
Kaiser Order Number: 222661
Line Item: 001

KAISER
ALUMINUM
FABRICATED PRODUCTS

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

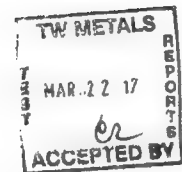
CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager



Plant Serial: 00024461
Kaiser Order Number: 222661
Line Item: 001

KAISER ALUMINUM FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CUSTOMER PO NUMBER: M49362357-1		CUSTOMER PART NUMBER: 42588		PRODUCT DESCRIPTION: Drawn Seamless Tube/Pipe	
KAISER ORDER NUMBER: 222204	LINE ITEM: 001	SHIP DATE: 01/16/2017	KAISER LOT NUMBER: F00231879	ALLOY: 6061	TEMPER: T6
WEIGHT SHIPPED: 541.000 LB	QUANTITY: 195.000 PCS	B/L NUMBER: 224049	DIAM/BAFF/HKNS: 5-89	WIDTH:	LENGTH: 12.000 FT
SHIP TO: TW METALS INC 235 WEST TUBEWAY DRIVE CAROL STREAM, IL 60188 USA			SOLD TO: TW METALS INC 760 CONSTITUTION DRIVE SUITE 204 EXTON, PA 19341 USA		

TW METALS
 TEST JAN 23 17
 REPORTS
 ACCEPTED BY *[Signature]*

Actual Physical Properties

REFERENCE	DASH#	SAMPLE#	UTS (KSI)	YTS (KSI)	ELONG%	HARDNESS	CON%IACS	BEND
F00231879	0001	1	47.0	39.5	22.0	N/A	N/A	N/A

Chemical Composition (wt%), Aluminum Remainder

LIMITS	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Bi	Zr	Ea	Tot
Maximum	0.80	0.70	0.40	0.15	1.20	0.35	0.25	0.15	NA	NA	NA	0.05	0.15
Minimum	0.40	0.00	0.15	0.00	0.80	0.04	0.00	0.00	NA	NA	NA	0.00	0.00
D76392	.58	.32	.23	.05	.99	.09	.07	.03	.00	.00	.00	.01	.02

Applicable Requirements:

Description: OD: 0.6250"; Wall: 0.1250"; Round @
 AMS4082P AMS-WW-T-700/6C ASTM B210-12 WW-T-700/6F
 WE TAKE EXCEPTION TO PARA. 5.2.1., Per AMS-4082P, WAS NOT OILED.
 This Product Complies to FAR BAA, DFARS BAA, FAR TAA
 COMPLIES TO DIN EN 10204 JAN 2005
 No Weld Repair. Mercury Free.

Miscellaneous Notes

MANUFACTURED IN USA MELTED IN USA
 MATERIAL COMPLIES WITH FAR BAA (FAR 52.225-1, BUY AMERICAN ACT- SUPPLIES), DFARS BAA
 (DFARS 252.225-7001 BUY AMERICAN ACT & BAL OF PAYMENTS PROG), AND FAR TAA (FAR 52.225-5
 TRADE AGREEMENTS).

Plant Serial: 00023919
 Kaiser Order Number: 222204
 Line Item: 001

AK

KAISER
ALUMINUM
FABRICATED PRODUCTS

Best in Class

CERTIFIED TEST REPORT

<http://Online.KaiserAluminum.com>

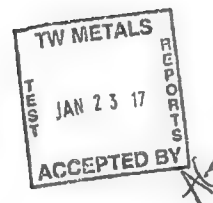
KAISER ALUMINUM
FABRICATED PRODUCTS, LLC
6573 W. WILLIS ROAD
CHANDLER, AZ 85226

CERTIFICATION

Kaiser Aluminum Fabricated Products, LLC ('Kaiser') hereby certifies that metal shipped under this order has been inspected and tested and found in conformance with the applicable specifications forming a part of the description set forth in Kaiser's sales acknowledgement form. Any warranty is limited to that shown on Kaiser's general terms & conditions of sale. Test reports are on file subject to examination.

Hans Kattentidt, Quality Manager

[Signature]



AK

Abnahmeprüfzeugnis 3.1 - DIN EN 10204:2005



Inspection Certificate 3.1 - DIN EN 10204:2005 / Certificat de Reception 3.1- DIN EN 10204:2005

Kunde: TW Metals (PA)

Zeugnisnummer: 948/17

Client:

Cert No. / No. du certificat:

760 Constitution Drive P.O. Box 644
19341 - 06 EXTON, PA USA

Bestellnummer: M 49370807

Order No. / No. de commande

Produkt: Rohre nahtlos gepresst und gezogen

ALUnna Auftragsbest.-Nr.: 65383/100

Product / Produit: Tubes seamless extruded and drawn

ALUnna Conf.-No. / conf. de commande:

Spezifikation: AMS - WW - T - 700/6C; AMS 4082P; ASTM B 210-12; WW-T-700/6F; -

Specification:

Werkstoff:

Zustand: T 6

Alloy/Alliage:

Temper/Etat

Abmessung

6061
2,000 INCH x 1,750 INCH x 0,125 INCH
x 12,000 FEET

Size / Dimension

Kennzeichnung

Cert No. 948/17- ALUnna - WW-T-700/6(F) - AMS-WW-T-700/6 (C) - AMS 4082 (P) - ASTM B210 (12) - ALUNNA ORDER CONF. NO. 65383/100 - CPB 300

Marking/Marquage:

Kennzeichnung

6061 - T 6 - 2.000" OD X 0.125" Wall - Cast No. 5796-1 - Heat Lot No. 1403036 - Unna No. 62117/200

Marking/Marquage:

Lieferung

pcs.

lbs

Country of Manufacture: Germany

Delivered Material / Matériel délivré:

56

582

DAS
5
9-89

1. Chemische Analyse

Chemical Analysis / analyse chimique

	Si	Fe	Cu	Mn	Mg	Cr	Zn	Ti	Pb	Zr	Bi	Sn	Ni	Na
Charge/ min.	0,40		0,15		0,8	0,04								
Cast No. max.	0,8	0,7	0,40	0,15	1,2	0,35	0,25	0,15						
5796-1/16	0,710	0,329	0,254	0,114	1,035	0,267	0,033	0,031	0,001	0,0363	0,0087	0,0011	0,0060	0,0001

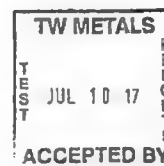
Hydrogen content: 0,13

ccm/100 g Al Elements without indication < 0,01 %

country of melt manufacturer: Germany

Products are in accordance with applicable RoHS

FAR BAA:	Cannot certify compliance
DFARS BAA:	Complies
FAR TAA:	Cannot certify compliance



Ergebnis der Prüfungen:

Es wird bestätigt, daß das Material geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht
We confirm that the material has been tested and applies to the agreements made on receipt of the order

Test results:

Nous confirmons que le matériel a été contrôlé et correspond avec les conventions faites à la réception de la commande

Resultats:

Certified acc. DIN EN ISO 9001:2008 and DIN EN 9100:2009

released by

31.05.2017

valid until 2019-11-10

TÜV Nord - Cert.- Reg. No.: 44 100 131576 and 44 117 131576

Suckow

Aluminiumwerk Unna AG, Uelzener Weg 36, 59425 Unna, Germany

Electronically Generated Certificate - Valid without signature

Abnahmeprüfzeugnis 3.1 - DIN EN 10204:2005



Inspection Certificate 3.1 - DIN EN 10204:2005 / Certificat de Reception 3.1 - DIN EN 10204:2005

Kunde: TW Metals (PA)
Client: 760 Constitution Drive P.O. Box 644
 19341 - 064EXTON, PA USA

Zeugnisnummer: 948/17
Cert No. / No. du certificat:
Bestellnummer: M 49370807
Order No. / No. de commande
ALUnna Auftragsbest.-Nr: 65383/100
ALUnna Order Conf.No.:

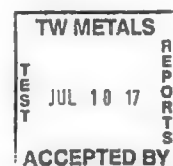
Kennzeichnung Cert No. 948/17- ALUnna - WW-T-700/6(F) - AMS-WW-T-700/6 (C) - AMS 4082 (P) - ASTM B210 (12) - ALUNNA ORDER CONF. NO.
Marking/Marquage: 65383/100 - CPB 300
Kennzeichnung 6061 - T 6 - 2.000" OD X 0.125" Wall - Cast No. 5796-1 - Heat Lot No. 1403036 - Unna No. 62117/200
Marking/Marquage:

Lieferung pcs. lbs **Country of Manufacture: Germany**
Delivered Material / Matériel délivré: 56 582

2. Mechanische Eigenschaften

Mechanical Properties / Valeurs Mécaniques

Anforderungen Requirements	tensile (Rm) ksi	yield (Rp0,2) ksi	elongation 2" %	elongation A %	Hardness HB	Heat Lot No.
	42,0	35,0	10,0			
1	45,542	36,550	21,1			1403036
2	45,542	36,695	20,1			



Ergebnis der Prüfungen:

Es wird bestätigt, daß das Material geprüft wurde und den Vereinbarungen bei der Bestellannahme entspricht
 We confirm that the material has been tested and applies to the agreements made on receipt of the order

Test results:

Nous confirmons que le matériel a été contrôlé et correspond avec les conventions faites à la réception de la commande

Resultats:

31.05.2017

Certified acc. DIN EN ISO 9001:2008 and DIN EN 9100:2009
 valid until 2019-11-10
 TÜV Nord - Cert.- Reg. No.: 44 100 131576 and 44 117 131576
 Aluminiumwerk Unna AG, Uelzener Weg 36, 59425 Unna, Germany

released by
 Suckow

Electronically Generated Certificate - Valid without signature

116

PUFA™

Producer of Premium Stainless Steel Seamless Tubes

MILL TEST REPORT

Purchaser.: TW METALS-Carol Stream				Certificate No.: 16-1-92					
Contract No.: TWM P.O.No.: M49336439				Date of Issue.: 2016.1.5					
Commodity: Stainless Steel Seamless Tubes		Specifications: ASTM A213-15c/ASME SA213-15/ASTM A269-15a EAW							
Process: Cold Drawn				Delivery Condition: OD Polished to 240 Grit					
Steel Grade	Heat Number	Lot Number	Dimensions		Quantity				
					Pieces	Feet			
TP304/TP304L	DAS 5 889X1506-712	12-19	1/2" x 0.049" x 20'		2300	46,000			
Chemical Composition by Weight (%)									
Element	C	Mn	P	S	Si	Cr	Ni	Mo	Co
Requirements	≤0.035	≤2.00	≤0.045	≤0.030	≤1.00	18.00-20.00	8.00-12.00	-	-
Ladle Analysis	0.013	0.65	0.032	0.002	0.32	18.28	8.05	-	-
Product Analysis	0.017	0.61	0.033	0.002	0.28	18.31	8.55	-	-
Mechanical Properties									
Test Item	Elongation (% in 2")		Tensile Strength (PSI) Rm			Yield Strength (PSI) Rp / 0.2%			
Requirements	≥35		≥75,000			≥30,000			
Test Results	63/64		97,000/98,000			43,000/44,000			
Test Item	Reduction of Area Z (%)	Hardness	Cold Bend Test	Flaring Test	Flattening Test	Flange Test	P.M.I. Test		
Requirements	-	HRB≤80	-	22%	e=0.09	-	-		
Test Results	-	77/79	-	Passed	Passed	-	OK		
Test Item	Eddy Current Test	Air Underwater Pressure Test	Ultrasonic Test	Intergranular Corrosion Test	Macroscopic Inspection				
Requirements	ASTM E 426	-	-	ASTM A262 E	End Cut	Appearance			
Test Results	Passed	-	-	OK	OK	OK			

ISO 9001:2008 Certified by Intertek 110703068

PED Certified by SZUTEST 2195-PED-1526002

Additional Remarks:

- (1) All tubes annealed to above 1900 Deg F and water quenched below 800 Deg F in 3 minutes
- (2) All tubes tested per ASTM A1016-14
- (3) Materials is NACE MR0103-2007 compliant (per Section 2.5)
- (4) Materials is NACE MR0175/ISO 15156-2003 compliant (per Section 4.2.1)
- (5) In Compliance with EN 10204-3.1
- (6) In Compliance with RoHS Stipulation
- (7) No weld repair performed
- (8) Free from mercury contamination
- (9) Free from radioactive contamination
- (10) Billets melt and pipes/tubes manufactured in China
- (11) All tubes 100% PMI tested
- (12) All tubes 100% Eddy Current tested

**CANNOT CERTIFY COMPLIANCE
FAR BAA / DFARS BAA / FAR TAA**



By:

James Shi

James Shi / Manager

Quality Control Department

We hereby certify that this report is true and correct.

Shanghai Pufa Stainless Steel Pipe Factory

No. 59, Shuangye Road, Wanggang, New Pudong District, Shanghai, China



W

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6061T6 0.315 W.058

PO / BATCH NO.: 03714/138184

DATE: AUG 01 2017

MATERIAL CERT REC'D: yes

THICKNESS ORDERED: W.058

QUANTITY RECEIVED: 48'

THICKNESS RECEIVED: W.058

QUANTITY INSPECTED: 48'

SHEET SIZE ORDERED:

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="radio"/> N	
CORRECT FINISH	<input checked="" type="radio"/> Y	N	
CORROSION	Y	<input checked="" type="radio"/> N	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y	N	ASim B210
CORRECT THICKNESS	<input checked="" type="radio"/> Y	N	
PHOTO REQUIRED	Y	<input checked="" type="radio"/> N	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y	N	HT #2078167
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y	N	6061T6
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y	N	6061T6
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="radio"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="radio"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <u>5</u> DATE: <u>AUG 01 2017</u>	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

C	COMPLETE REFORMAT. ADDED T8610 & T8611. ADDED AMS 4083 ASTM B210 & ASTM B241 ADDED MATERIAL TOLERANCE	13.06.12
B	AUD Q3-A-200/8 & Q3-A-225/6	AJS
A	NEW ISSUE	CP
		DS
		BY
		DATE
DESIGN	AJS	
DRAWN	AJS	
CHECKED	<i>[Signature]</i>	
MFG. APPR.	<i>[Signature]</i>	
APPROVED	<i>[Signature]</i>	
DE APPR.	<i>[Signature]</i>	
DATE	13.06.12	

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6061T6+0.375W.058
 DATE: AUG 01 2017

PO / BATCH NO.: PO37126/M138184

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 48'
 QUANTITY INSPECTED: 48'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W.058
 THICKNESS RECEIVED: W.058
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	ASim B210
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	111# F00234392
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	6061T6+
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	6061T6
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

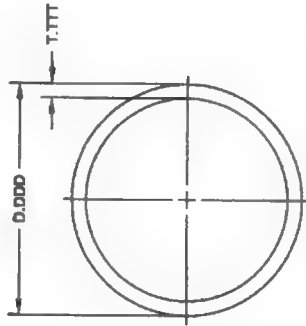
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____ DATE: <u>AUG 01 2017</u>	DAS <u>5</u> 9-89	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



PURCHASE MATERIAL: 6081-T8/T62/T6510/T6511 SEAMLESS TUBING

SPECIFICATION: WW-T-7006

OR QQ-A-200/8 OR QQ-A-225/8

OR AMS 4090 OR AMS 4082 OR AMS 4063

OR ASTM B210 OR ASTM B241

PART NUMBER: 8-89 M8081T6T10.DDD|W|T.TTT

OD | WALL

WHERE "D.DDD" = OD IN INCHES

"T.TTT" = WALL THICKNESS

EG. 3/8" OD X 0.063 WALL = M8081T6T10.375W0.058

MATERIAL TOLERANCE:

PER ANSI H35.2

RELEASED
R 2013-07-02

C	COMPLETE REFORMAT. ADDED T6510 & T6511. ADDED AMS 4083, ASTM B210 & ASTM B241 ADDED MATERIAL TOLERANCE	AJS	13.06.12
B	ADD QQ-A-200/8 & QQ-A-225/8	CP	04.01.23
A	NEW ISSUE	DS	01.06.21
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED	W		
MFG. APPR.	M8081T6T		
APPROVED			
DE APPR.			
DATE	13.06.12		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M8081T6T			
REV. C			
SHEET 1 OF 1			
TITLE			
8081-T8 TUBING			
SCALE			
NTS			
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: 6061T6.500w.058

PO / BATCH NO.: PO37126/M138184

DATE: AUG 01 2017

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 48'
 QUANTITY INSPECTED: 48'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: w.058
 THICKNESS RECEIVED: w.058
 SHEET SIZE ORDERED:
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	Astm B210
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	47 # F00236125
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	6061T6
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	6061T6
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

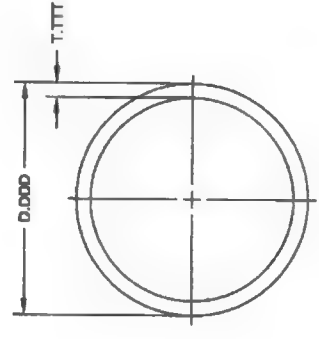
testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: _____	DAS <u>5</u>	SIGNED OFF BY: _____
DATE: <u>AUG 01 2017</u>	9-89	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

1 2 3 4 5 6 7 8

D C B A



PURCHASE MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING

SPECIFICATION: WW-7-7006
OR QQ-A-200/8 OR QQ-A-225/8
OR AMS-4080 OR AMS 4082 OR AMS 4083
OR ASTM B210 OR ASTM B241

PART NUMBER Q-89 M6061T6T6P.DDDWT.TTT
OD | WALL

WHERE "D.DDD" = OD IN INCHES
"T.TTT" = WALL THICKNESS
EG. 3/8" OD X 0.058 WALL = M6061T6T6.375W0.058
MATERIAL TOLERANCE: PER ANSI H35.2

RELEASED
2013-07-02

C	COMPLETE REFORMAT, ADDED T6510 & T6511. ADDED AMS 4083, ASTM B210 & ASTM B241 ADDED MATERIAL TOLERANCE	AJS	13.06.12
B	ADD QQ-A-200/8 & QQ-A-225/8	CP	04.01.23
A	NEW ISSUE	DS	01.06.21
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.06.12		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M6061T6T			
TITLE 6061-T6 TUBING			
REV. C SHEET 1 OF 1			
SCALE NTS			
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1 2 3 4 5 6 7 8

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6+0.625W.125

PO / BATCH NO.: pc37124/m138184

DATE: AUG 01 2017

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W.125
 THICKNESS RECEIVED: W.125
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT FINISH	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORROSION	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	ASTM B210
CORRECT THICKNESS	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
PHOTO REQUIRED	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	147 # F00231879
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	6061T6
CORRECT M# ON THE MATERIAL	<input checked="" type="radio"/> Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	6061T6
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="radio"/> N <input checked="" type="radio"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>DAS</u> <div style="text-align: center;">5</div>	SIGNED OFF BY: _____	
DATE: <u>AUG 01 2017</u>	DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

PURCHASE MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING

SPECIFICATION: **DAS**

WWT-72006

OR QQ-A-200/8 OR QQ-A-225/8
OR QQ-A-225/8 OR AMS 4082 OR AMS 4083
OR ASTM B210 OR ASTM B241

PART NUMBER: **59**

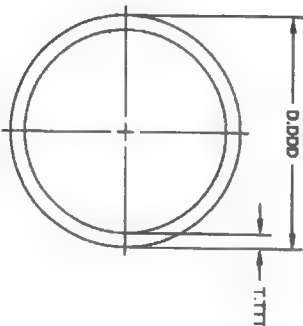
M6061T6T DDDO/TTTT
OD | WALL

WHERE "D.DDD" = OD IN INCHES
"T.TTT" = WALL THICKNESS

EG. 3.0" OD X 0.059 WALL = M6061T6T0.375W0.059

MATERIAL TOLERANCE:

PER ANSI H35.2



RELEASED
2013-07-02

C	COMPLETE REFORMAT, ADDED T6510 & T6511. ADDED AMS 4083, ASTM B210 & ASTM B241	A/S	13.06.12
B	ADD QQ-A-200/8 & QQ-A-225/8	CP	04.01.23
A	NEW ISSUE	DS	01.06.21
REV.	DESCRIPTION	BY	DATE
DESIGN	A/S		
DRAWN	A/S		
CHECKED	UP		
MFG. APPR.	M6061T6T		
APPROVED	TITLE		
DE APPR.	8061-T6 TUBING		
DATE	13.06.12		

COMPANY: 6061 BY DART AEROSPACE LTD.
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M6061T6T2,000W.125

PO / BATCH NO.: P037126/M13884

DATE: AUG 01 2017

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 24'
 QUANTITY INSPECTED: 24'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W.125
 THICKNESS RECEIVED: W.125
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	Asm B210
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N	Ht #1403036
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	6061T6T
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	6061T6
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

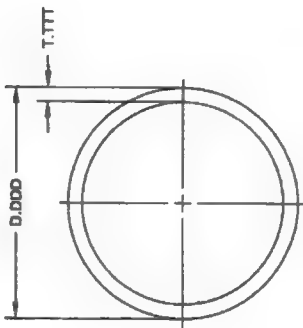
CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK.
 RECORD RESULTS BELOW

	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS</u>	SIGNED OFF BY: _____		
DATE: <u>AUG 01 2017</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in



RELEASED
2013-07-02

PURCHASE MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING

SPECIFICATION: WW-T-7008
OR QQ-A-200/8 OR QQ-A-225/8
OR AMS-4068-OR AMS 4082 OR AMS 4083
OR ASTM B210 OR ASTM B241

PART NUMBER: M6061T6TDDDD/MT.TTT
OD | WALL

WHERE "D.DDD" = OD IN INCHES
"T.TTT" = WALL THICKNESS
EG. 3/8" OD X 0.058 WALL = M6061T6T0.375X0.058
MATERIAL TOLERANCE: PER ANSI H35.2

C	COMPLETE REFORMAT. ADDED T6510 & T6511. ADDED AMS 4083, ASTM B210 & ASTM B241 ADDED MATERIAL TOLERANCE	AJS	13.06.12
B	ADD QQ-A-200/8 & QQ-A-225/8	CP	04.01.23
A	NEW ISSUE	DS	01.06.21
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	13.06.12		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA DRAWING NO. M6061T6T TITLE 6061-T6 TUBING SCALE NTS SHEET 1 OF 1 COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, WITHOUT PERMISSION IN WRITING.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M304+R0.500W.049

PO / BATCH NO.: 0037126/M138184

DATE: AUG 01 2017

MATERIAL CERT REC'D: yes
 QUANTITY RECEIVED: 40'
 QUANTITY INSPECTED: 40'
 QUANTITY REJECTED: 0

THICKNESS ORDERED: W.049
 THICKNESS RECEIVED: W.049
 SHEET SIZE ORDERED: NA
 SHEET SIZE RECEIVED: NA

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	ASTM A213
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	HF# YX1506712
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	304+R
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	304T
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	<input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	<input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: _____ DATE: <u>AUG 01 2017</u>	DAS 5 9-89	SIGNED OFF BY: _____ DATE: _____	

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 304/316 SS SEAMLESS ROUND TUBING

SPECIFICATION:

ASTM A213 OR ASME SA213 OR ASTM A269

WALL THICKNESS TOLERANCE PER ASTM A269 AS FOLLOWS:

OD (IN)	PERMISSIBLE	
	OD TOL (IN)	WALL TOL
UP TO 1/2	±0.005	±15%
1/2 TO 1 1/2 EXCL.	±0.005	±10%
1 1/2 TO 3 1/2 EXCL.	±0.010	±10%
3 1/2 TO 5 1/2 EXCL.	±0.015	±10%
5 1/2 TO 8 EXCL.	±0.030	±10%

PART NUMBER:

M304TR0.DDD|W|.TTT

WHERE "D.DDD" = OUTSIDE DIAMETER IN INCHES
AND ".TTT" = WALL THICKNESS IN INCHES

EG. 0.375" OD X 0.085" WALL TUBING = M304TR0.375W.085

RELEASED
R 08/08/23 MJD

B	REFORMAT DWG. ADD SPECS (ZN DB-1).	CP	08.10.20
A	NEW ISSUE	DS	01.08.08
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
DE APPR.			
DATE	08.10.20		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M304TR			
REV. B SHEET 1 OF 1			
TITLE 304/316 ROUND TUBING			
SCALE NTS			
DATE 08.10.20			
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37126

Purchase Order Date 7/19/2017

PO Print Date 7/19/2017

Page Number 1 of 4

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Ship To : DART AEROSPACE LTD
1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

E-MAILED
JUL 19 2017

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	M6061T6T0.3125W.058	ALUM TUBE .3125 x .058w	7/27/2017 Yes 7/27/2017		48.00 f	\$2.50	\$120.00
MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241							
Line Total:							\$120.00
2	M6061T6T0.375W.058	6061-T6 RD Tube .375 x.058W	7/27/2017 Yes 7/27/2017		48.00 f	\$2.15	\$103.20
MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR ASTM B241							
Line Total:							\$103.20

QA-7-31

Note:

7/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37126

Purchase Order Date 7/19/2017

PO Print Date 7/19/2017

Page Number 2 of 4

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact**Ship To Phone**

Ship Via: YRC COLLECT

Ship Acct:**Buyer**

Chantal Lavoie

Customer POID

Customer Tax # 10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

3	M6061T6T0.500W.058	6061-T6 RD Tube .500 x.058W	7/27/2017	48.00	\$1.75	\$84.00
			Yes	f		
			7/27/2017			

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

Line Total: \$84.00

4	M6061T6T0.625W.125	6061-T6 RD Tube 0.625 X.125W	7/27/2017	24.00	\$5.15	\$123.60
			Yes	f		
			7/27/2017			

MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

Line Total: \$123.60

Note:

7/19/2017



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID PO37126

Purchase Order Date 7/19/2017

PO Print Date 7/19/2017

Page Number 3 of 4

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 585 768 5600

Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

5	M6061T6T2.00W0.125	6061T6 RD TUBE 2.00 X.125W	7/27/2017	24.00	Yes	7/27/2017	\$8.50	\$204.00
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MATERIAL: 6061-T6/T62/T6510/T6511 SEAMLESS TUBING
AS PER WW-T-700/6 OR QQ-A-200/8 OR QQ-A-225/8 OR
AMS 4080 OR AMS 4082 OR AMS 4083 OR ASTM B210 OR
ASTM B241

Line Total: \$204.00

6	M304TR0.500W.049	304 RD Tube .500 x .049W	7/27/2017	40.00	Yes	7/27/2017	\$2.80	\$112.00
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MATERIAL: AISI 304/316 SA SEAMLESS ROUND TUBING
AS PER ASTM A213 OR AMSE SA213 OR ASTM A269

Line Total: \$112.00

Note:

7/19/2017



Dart Aerospace Ltd.
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Hawkesbury, ON K6A 1K7
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Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO37126**

Purchase Order Date 7/19/2017

PO Print Date 7/19/2017

Page Number 4 of 4

Order From :

VU-TWM001

TW METALS
PO BOX 933014
ALTANTA, GA 31193-3014
US

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1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

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Ship To Contact

Ship To Phone

Ship Via: YRC COLLECT

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Buyer

Chantal Lavoie

Customer POID

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Terms

Net 30

Currency

USD

FOB

FCA - (Free Carrier)

7	71401-45	PROCUREMENT QUALITY CLAUSES	✓	7/27/2017	1.00	✓	\$0.00	\$0.00
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No

7/27/2017

Procurement Quality Clauses

A005 right of entry

A012 chemical and physical test report

A016 personnel qualification

A017 raw material identification

A026 certification of material conformance

A041 quality management system

A042 dart notification by supplier

A043 retention of quality documents

817721

Line Total: \$0.00

PO Total: \$746.80

Note: Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.